

REMARKS

In the November 4, 2004 Office Action, the Examiner noted that claims 1-46 were pending in the application and claims 3-11, 14-20, 22, 25-30 and 33-39 were allowed; objected to the specification and claims; and rejected claims 1, 2, 12, 13, 21, 23, 24, 31, 32, 40, 41, and 43-46 under 35 USC § 103(a). It is assumed that there was a typographical error in paragraph 8 indicating that section 102(b) was used, since two references were relied on in making the rejection of the claims in that paragraph. Claims 1-46 remain in the case. The Examiner rejections are traversed below.

Objection to Specification

In item 5 on pages 3-4 of the Office Action, the Examiner objected to claims 9, 17, 27, 37, 43 and 45 due to the use of the phrase "possessed by the user" (e.g., claim 9, line 2), because "the specification is silent as to ownership" (Office Action, page 4, line 2). It is noted that the objectionable phrase does not refer to ownership, but rather possession. The term "possessed" is used in the claims because ownership of the content of recordings of the type described in the specification does not pass to a person who has a compact disc (CD) or digital versatile disc (DVD) in his or her possession. While the word "possessed" does not appear in the specification, it is clear from the first and second paragraphs on page 3 of the application that "the playing of an audio CD in the user's computer" (page 3, line 13) requires that the audio CD be in the possession of the user, otherwise the user's computer would be unable to play it.

In item 5, the Examiner also objected to claims 10, 18, 28, 38 and 44, due to the description of the recordings as "digital files stored on mass storage accessible by a listener of the selected recording" (e.g., claim 10, lines 1-2), because it was alleged that the "specification provides no indication that the listener stored the files or that they are necessarily accessible" (Office Action, page 4, lines 4-5). First, it is noted that claims 10, 18, 28, 38, and 44 do not recite that the listener stored the digital files, only that they are "stored on mass storage accessible by a listener" (e.g., claim 10, line 2). It is unclear how the Examiner could question that the files on a compact disc are accessible, when, as noted above, the application describes "playing of an audio CD" (page 3, line 13). Clearly, one of ordinary skill in the art would consider the content of an audio CD to contain "digital files" (e.g., claim 10, line 1) and it is submitted that one of ordinary skill in the art would consider "mass storage" to an appropriate term to refer to what is used to store digital files accessed by a "CD player[,] ... DVD players and similar devices" (application, page 3, lines 3-4).

For the above reasons, withdrawal of the objections to the specification is respectfully requested. If the objections to the specification are not withdrawn, the Examiner is respectfully requested to contact the undersigned by telephone to arrange and Examiner Interview as discussed below.

Objection to Claims

In item 6 on page 4 of the Office Action, the Examiner objected to claims 5, 6, 12, 14, 20, 24, 30, 35, 36, 40-42 and 46 due to informalities. First, with respect to claims 5, 6, 35, 36, 41, and 42, the Examiner required the addition of a colon at the end of the preamble "to be consistent with the format of other claims" (Office Action, page 4, line 10). However, these are dependent claims in which the word "includes" is used in further defining the "determining operation" recited in an independent claim. Colons have been used in the claims of this application only after the words "comprising" in the independent claims and "comprises" in claims 29 and 45 which further define the subject matter of the independent claims from which they depend ("database system" in the case of claim 29 and "method" in the case of claim 45). Therefore, it is submitted that the way that colons are used in the claims in a consistent manner.

With respect to claim 12, the Examiner required the addition of "and" at the end of line 2. It is not understood why the Examiner is requiring that there be more than one "and" in the sequence of wherein clauses recited in claim 12. Since there is already an "and" at the end of line 6, no change has been made to claim 12.

With respect to claims 20, 30 and 46, the Examiner objected to use of the word "not" as improper. The basis for this objection was that this word "suggests that an element is being subtracted" (Office Action, page 4, lines 14-15). However, rather than being used to refer to exclusion of an element, "not" appears in defining "additional information stored in the at least one approximately matching record and not included in the at least one selected file" (claim 20, lines 2-3). In this context, the word "not" clarifies what is meant by "additional" information. It is submitted that there is no support in statutory law, regulations, case law, or the MPEP for refusing an applicant to use the word "not". If the Examiner will cite support for this requirement in one of these sources, the inappropriateness of relying on that statute, regulation, case or MPEP section will be addressed.

With respect to claims 30 and 46, the Examiner objected to the adverb "approximately" and suggested use of "the more standard 'substantially'" (Office Action, page 4, lines 17-18). While the term "substantially" might be commonly used in patent claims, the word "approximately" is much better understood by one of ordinary skill in the art of locating "at least one

approximately matching record" (e.g., claim 30, last line) in a database. It is submitted that the term "substantially" is less clearly defined in the art and as a result is a less appropriate word to be used in these claims

For the reasons set for the above, it is respectfully requested that all of the objections to the claims be withdrawn. If the Examiner maintains any of these objections, or finds new objections to the claims, the Examiner is respectfully requested to contact the undersigned by telephone to arrange an Examiner Interview as discussed below

Rejections under 35 USC § 103

In items 8-12 on pages 5-8 of the Office Action, claims 1, 2, 21, 23, 24, 31 and 32 were rejected as unpatentable over Pfeiffer et al. in view of Blum et al. and therefore, as noted above, it is assumed that this was a rejection under 35 USC § 103. In making this rejection, it was acknowledged that Pfeiffer et al. "does not mention size as a criteria" (Office Action, page 6, line 8). Therefore, column 25, line 51 of Blum et al. was cited as disclosing *"determining at least one matching record in the database for the at least one selected file based on the sample values and size of the at least one selected file"* (Office Action, page 6, lines 10-12).

First, it is noted that the word "size" is not used anywhere near line 51 in column 25 of Blum et al. The word "size" is only used in Blum et al. in relation to "bit size" (column 5, lines 54-55); "window size" (column 6, line 61); "window frame size" (column 7, line 19); "FFT size" (column 8, line 20); and "feature vector's size" (column 24, line 12). The only one of these uses of the word "size" that appears to be at all relevant to the invention is the last one. However, the paragraph that contains the quoted term states that the "feature vector constitutes a compact representation of a sound. It can represent sound files of any length without any corresponding increase in the feature vector's size" (column 24, lines 10-12). Thus, the size of the feature vector could not be used in determining whether or not there is a match between a record in a database and a selected file.

To further clarify what the word "size" related to, claims 1 and 31 have been amended to recite "an indication of an amount of data in the at least one selected file" (claims 1 and 31, last two lines). The cited portion, column 25, line 51 (of Blum et al. is part of a sentence that states the "method compares the supplied sound's trajectories with trajectories of equal length starting from successive frames of the stream" (column 25, lines 50-52). The term "trajectories" is defined as "new arrays of data values ... specifying the amplitude (loudness), pitch, and bandwidth, bass, brightness, and Mel-frequency cepstral coefficients (MFCCs) over the length of the sound file" (column 6, lines 24-28). There is no suggestion in this definition that the length of the

trajectory correlates to either the size of a sound file or "an indication of an amount of data in the at least one selected file" as now recited in claims 1 and 31. For at least the above reasons, it is submitted that claims 1 and 31 patentably distinguish over Pfeiffer et al. in view of Blum et al.

Since claims 2 and 32 depend from claims 1 and 31, respectively, it is submitted that claims 2 and 32 patentably distinguish over Pfeiffer et al. in view of Blum et al. for the reasons discussed above with respect to claims 1 and 31. In item 10 on page 6 of the Office Action, lines 4-9 in the right column of page 27 of Pfeiffer et al. was cited as disclosing "calculating approximate length information for the records in the database and for the at least one selected file ... and that the determining is also based on the approximate length information" (Office Action, page 6, lines 17-20). This portion of Pfeiffer et al. describes the storage of "mean statistics for the entire event: the beginning, the end, and the time window which contains the greatest change ... [where the] amount of change is ... determined by the variance" (Pfeiffer et al., page 27, right column, lines 4-7). The statement of a "very good" correlation at lines 7-9 of this portion of Pfeiffer et al. refers to the "correlation between 30-ms test patterns and stored patterns of a few seconds length but of the same event type" (page 27, right column, lines 7-9). Claims 2 and 31 have been amended to clarify that what is calculated is "approximate playback times for the files represented by the records in the database and for the at least one selected file" (e.g., claim 2, lines 3-5) where the files have been defined as being usable "to play back at least one of audio and video" (e.g., claim 2, lines 1-2). It is submitted that this is not what is described at the top of the right column of page 27 of Pfeiffer et al. Therefore, it is submitted that claims 2 and 32 further patentably distinguish over Pfeiffer et al. in view of Blum et al. for this additional reason.

In item 11 on page 7 of the Office Action, claim 21 was rejected over the combination of Pfeiffer et al. and Blum et al. for reasons similar to those used in rejecting claims 1 and 31. Claim 21 has been amended to clarify that at least one matching record in the database for the selected recording is determined "based on an indication of playback time of the selecting recording" (claim 21, lines 6-7). As discussed above, the cited portion (column 25, line 51) of Blum et al. relates to length of trajectories. No suggestion has been found in Blum et al. that the length of a trajectory is "an indication of playback time" as now recited in claim 21. Therefore, it is submitted that claim 21 patentably distinguishes over Pfeiffer et al. in view of Blum et al.

Claims 23 and 24 depend from claim 21 and therefore, claims 23 and 24 patentably distinguish over Pfeiffer et al. in view of Blum et al. for the reasons discussed above with respect to claim 21. In rejecting claims 23 and 24, the second line in the left column of page 23; the first

paragraph of section 3.3.1 on page 23; the second paragraph of section 3.3.2 on page 24; and the first line and paragraph "2." in the right column on page 26 were cited. It is clear from the first paragraph of section 3.3.1, that "Content-based Segmentation" as taught by Pfeiffer et al. starts with an operation "to distinguish between music, speech, silence and other sound sequences" (section 3.3.1 lines 5-6). The remainder of the first paragraph of section 3.3.1 describes performing speech recognition on speech, and for music, determining "note, bar or theme boundaries" (section 3.3.1, first paragraph, next-to-last line).

As described in the second paragraph of section 3.3.1, the segmentation taught by Pfeiffer et al. involves a "partition [of] the audio stream into similar segments" (lines 2-3), where the similarity is based on "both ... the temporal and ... frequency domain[s]" (lines 3-4). The final sentence of this paragraph (which refers to "note, bar or theme boundaries") is a description of what can be done subsequently with a segment that has been classified as music, where both the classification as music and subsequent operations thereon are described in following paragraphs. Thus, there is nothing in this paragraph or the words "audio segmentation" on the second line in the left column of page 23 that even suggests an "array with each element corresponding to a number of occurrences of the sampled digital data within a value band" (claims 23 and 24, lines 3-4).

Furthermore, the second paragraph of section 3.3.2 on page 24 of Pfeiffer et al. describes "a fundamental frequency (fuf) determination on the chords as a first step toward note analysis" (lines 1-3). It is asserted that the "sequence of fuf's ... is one of the parameters most important in determining the structure of a piece of music" (lines 3-7), but there is no suggestion in the second paragraph of section 3.3.2 of Pfeiffer et al. that "the structure of a piece of music" is determined by "calculating an average difference between the elements of the identifying signature array and the existing signature array for the recordings represented in the database" (claim 23, lines 9-10) or "calculating a matching percentage of corresponding elements in the identifying signature array and the existing signature arrays" (claim 24, lines 9-10). Therefore, it is submitted that claims 23 and 24 further patentably distinguish over Pfeiffer et al. in view of Blum et al.

In items 13-22 on pages 9-13 of the Office Action, claims 12, 13, 40, 41 and 43-46 were rejected under 35 U.S.C. § 103 as unpatentable over Pfeiffer et al. and Blum et al. combined with one or more of O'Hagan et al.; Lert, Jr. et al.; and McNab et al. Claims 12 and 13 depend from claim 1 and claims 40, 41 and 43-46 depend from claim 31; therefore, it is submitted that

claims 12, 13, 40, 41 and 43-46 patentably distinguish over the prior art for the reasons discussed above with respect to claims 1 and 31.

Request for Examiner Interview

In a telephone conversation with Examiner Richemond Dorvil in December 2004, the undersigned was informed that Examiner Nolan was no longer responsible for the examination of this application and that the application has been reassigned to Examiner Vijay Chawan. To expedite prosecution of this application, the undersigned respectfully request an Examiner Interview **prior to issuance of another Office Action** with Examiner Chawan or whoever else might be responsible for this application, unless the next Office Action is a Notice of Allowance.

Other Comments

Several of the claims include the phrase "at least one of A, B and C" as an alternative expression that means one or more of A, B and C, contrary to the holding in *Superguide v. DIRECTV*, 69 USPQ2d 1865 (Fed. Cir. 2004), but consistent with the intended meaning of patent practitioners prior to the *Superguide* decision.

Summary

It is submitted that the cited prior art references, taken individually or in combination, do not teach or suggest the features of the present claimed invention. Thus, it is submitted that claims 1-46 are in a condition suitable for allowance. Reconsideration of the claims and an early Notice of Allowance are earnestly solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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